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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/569,319	02/22/2006	Alexandros Tourapis	PU040213	5710
24498 7590 12/21/2010 Robert D. Shedd, Patent Operations THOMSON Licensing LLC P.O. Box 5312 Princeton, NJ 08543-5312				
EXAMINER BAYARD, EMMANUEL				
ART UNIT		PAPER NUMBER		
2611				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/569,319

Applicant(s)

TOURAPIS ET AL.

Examiner

Emmanuel Bayard

Art Unit

2611

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 October 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

This is in response to amendment filed on 10/27/10 in which claims are 1-22 pending. The applicant's amendments have been fully considered but they are moot based on the new ground of rejection.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ozcelik et al U.S. Patent No 5,574,663 in view of Banerji et al U.S. Pub No 20050008240.

As per claims 1, 9, 14-15, 19 Ozcelik et al teaches in a video decoder, a method, for decoding a hybrid intra-inter encoded block comprising (see abstract): combining (see fig.1 element 154]) a first spatial prediction of a current block (see fig.1 element 118) with a second temporal prediction of a current block (see fig.1 element 120 and col.3, lines 8-10)

However Ozcelik fails wherein the first spatial prediction of the current block is intra prediction and the second temporal prediction of the current block is inter prediction.

Banerji et al teaches teach wherein the combine **intra-prediction** to exploit **spatial statistical and inter- prediction** to exploit **temporal statistical** and which is functional equivalent to the first spatial prediction of the current block is intra prediction and the second temporal prediction of the current block is inter prediction (see paragraph [0009] [0235]).

It would have been obvious to one of ordinary skill in the art to implement the teaching of Banerji into Ozcelik as to generate stitched reconstructed block in the next frame of the sequence and also describe an exact process for decoding the video as taught by Banerji (see abstract and paragraph [0009]).

As per claim 2, Ozcelik and Banerji in combination would teach wherein encoding the block includes combining the first prediction and the second prediction and a third prediction of the current block as to generate stitched reconstructed block in the next frame of the sequence and also describe an exact process for decoding the video as taught by Banerji (see abstract and paragraph [0009]).

As per claim 3, Ozcelik and Banerji in combination would teach further comprising reducing the filter strength of a deblocking filter adapted to increase the correlation between pixels adjacent to the current block as to reduce blocking artifacts leading to poor picture quality and inaccurate prediction as taught by Banerji (see abstract and paragraph [0021]).

As per claims 4 and 21, Ozcelik and Banerji in combination would teach wherein the first prediction and the second prediction are combined by averaging the first prediction and the second prediction as to generate stitched reconstructed block in the

next frame of the sequence and also describe an exact process for decoding the video as taught by Banerji (see abstract and paragraph [0009]).

As per claims 5, 18 and 22 Ozcelik and Banerji in combination would teach, wherein the first prediction and the second prediction are combined by weighting each of the first prediction and the second prediction as to generate stitched reconstructed block in the next frame of the sequence and also describe an exact process for decoding the video as taught by Banerji (see abstract and paragraph [0009]).

As per claim 6, Ozcelik and Banerji in combination would teach wherein the current block is a 16×16 macro block as to generate stitched reconstructed block in the next frame of the sequence and also describe an exact process for decoding the video as taught by Banerji (see abstract and paragraph [0009]).

As per claim 7, Ozcelik and Banerji in combination would teach, wherein the current block is a sub-macro block as to generate stitched reconstructed block in the next frame of the sequence and also describe an exact process for decoding the video as taught by Banerji (see abstract and paragraph [0009]).

As per claim 8, Ozcelik and Banerji in combination would teach wherein the current block is a 4×4 sub-macro block partition as to generate stitched reconstructed block in the next frame of the sequence and also describe an exact process for decoding the video as taught by Banerji (see abstract and paragraph [0009]).

As per claim 10, Ozcelik and Banerji in combination would teach wherein the combining unit is adapted to average together the first intra prediction of the block and the first inter prediction of the block as to generate stitched reconstructed block in the

next frame of the sequence and also describe an exact process for decoding the video as taught by Banerji (see abstract and paragraph [0009]).

As per claim 11, Ozcelik and Banerji in combination would teach wherein the hybrid intra-inter coded block is the average of the first intra prediction and the first inter prediction as to generate stitched reconstructed block in the next frame of the sequence and also describe an exact process for decoding the video as taught by Banerji (see abstract and paragraph [0009]).

As per claim 12, Ozcelik and Banerji in combination would teach, television comprising a video decoder as claimed in Claim 9 as to generate stitched reconstructed block in the next frame of the sequence and also describe an exact process for decoding the video as taught by Banerji (see abstract and paragraph [0009]).

As per claim 13, it is rejected under the same rational as described in claim 1 above. It's obvious to one skilled in the art that the combination of OZcelik and Banerji teaches A video decoder (see abstract) adapted to decode a bitstream including bi-predictive intra-inter encoded blocks as to generate stitched reconstructed block in the next frame of the sequence and also describe an exact process for decoding the video as taught by Banerji (see abstract and paragraph [0009]).

As per claim 16, Ozcelik and Banerji in combination would teach wherein the combining unit is a summing block as to generate stitched reconstructed block in the next frame of the sequence and also describe an exact process for decoding the video as taught by Banerji (see abstract and paragraph [0009]).

As per claim 17, Ozcelik and Banerji in combination would teach wherein the combining unit combines the first intra prediction and the first inter prediction by average the two predictions as to generate stitched reconstructed block in the next frame of the sequence and also describe an exact process for decoding the video as taught by Banerji (see abstract and paragraph [0009]).

As per claim 20, Ozcelik and Banerji in combination would teach wherein the step of combining is accomplished using a summing block as to generate stitched reconstructed block in the next frame of the sequence and also describe an exact process for decoding the video as taught by Banerji (see abstract and paragraph [0009]).

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
4. Kurobe et al U.S. Patent No 6,389,073 B1.
5. Wilkinson U.S. Patent No 5,659,363.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emmanuel Bayard whose telephone number is 571 272 3016. The examiner can normally be reached on Monday-Friday (7:Am-4:30PM) Alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh Fan can be reached on 571 272 3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

12/17/2010

Emmanuel Bayard
Primary Examiner
Art Unit 2611

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